

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008898**Date Inspected:** 09-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Liu Fa Wen**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Crossbeams**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG CROSS BEAM CB1

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB2

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB3

This crossbeam has been loaded on the ship.

OBG CROSS BEAM CB4

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This QA observed ZPMC qualified welding personnel identified as 220063 perform FCAW welding in the FL3 area of segment 5BW on weld joint identified as SEG023-PP033-146. ZPMC QC identified as Mr. Song Hui was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-Tc-U4b-F.

This QA observed ZPMC qualified welding personnel identified as 220069 perform FCAW welding in the FL3 area of segment 5BE on weld joint identified as SEG024-PP033-173. ZPMC QC identified as Mr. Song Hui was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-Tc-U4b-F.

OBG CROSS BEAM CB5

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB6

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB7

This QA observed ZPMC workers trimming west side panel gussets identified as X206 to blend into base metal. The trimming was being performed using Carbon arc gouging. No other significant work was observed on this crossbeam during the time QA was present.

This QA observed ZPMC qualified welding personnel identified as 214453 and 216667 perform SMAW repair welding on various weld joints in this crossbeam. ZPMC QC identified as Mr. Chen Xi was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-2G (2F)-repair and WPS-345-SMAW-3G (3F)-repair.

OBG CROSS BEAM CB8

This QA observed ZPMC qualified welding personnel identified as 220688 perform FCAW welding on weld joints identified as CB202A-008-002. ZPMC QC identified as Mr. Liu Chuan Gang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U4b-F.

This QA observed ZPMC qualified welding personnel identified as 222396 perform FCAW welding on weld joints identified as FB204-020-087. ZPMC QC identified as Mr. Liu Chuan Gang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-B-U2-F.

This QA observed ZPMC qualified welding personnel identified as 048625 perform FCAW welding on weld joints identified as FB205-020-038. ZPMC QC identified as Mr. Liu Chuan Gang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U4b-F.

This QA observed ZPMC qualified welding personnel identified as 051246 perform FCAW welding on weld

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joints identified as FB205-018-038. ZPMC QC identified as Mr. Liu Chuan Gang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U4b-F.

This QA observed ZPMC qualified welding personnel identified as 049769 perform SMAW welding on temporary corner lifting lugs. ZPMC QC identified as Mr. Liu Chuan Gang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2214-Tc-U4b.

OBG CROSS BEAM CB9

This QA observed ZPMC qualified welding personnel identified as 053753 perform SMAW welding on weld joint identified as CB202G-021-140. ZPMC QC identified as Mr. Meng Lin Nan was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2113.

This QA observed ZPMC qualified welding personnel identified as 070007 perform SMAW welding on weld joint identified as CB202G-023-139. ZPMC QC identified as Mr. Meng Lin Nan was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2113.

This QA observed ZPMC qualified welding personnel identified as 067707 perform SMAW welding on weld joint identified as CB202G-024-157. ZPMC QC identified as Mr. Meng Lin Nan was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2113.

OBG CROSS BEAM CB10

This QA observed ZPMC qualified welding personnel identified as 051359 perform SMAW base metal repair welding in various areas in this crossbeam. ZPMC QC identified as Mr. Yin Dong Hai was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2113.

OBG CROSS BEAM CB11

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB12

This QA observed ZPMC qualified welding personnel identified as 069118 perform SMAW welding on weld joints identified as CB202G-037-018. ZPMC QC identified as Mr. Xia Yong Zheng was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-B-U2-F.

OBG CROSS BEAM CB13

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This QA observed ZPMC personnel preparing to fit floor beam corner sections to the side panels. No other significant work was observed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB14

This QA observed that ZPMC has flame straightened the excessive weld distortion on the intermediate panel following the guidelines of approved Heat Straightening Report HSR (B)-318. This panel was mentioned in a previous incident report concerning the excessive distortion and heat straightening without Engineers approval.

OBG CROSS BEAM CB15

This QA observed ZPMC personnel beveling side panel identified as SP205A. No other significant work was observed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB16

This QA observed ZPMC worker back gouge both CJP panel splice joints on the east side panel. No other significant work was observed on this crossbeam during the time QA was present.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

As mentioned above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (15000422372), who represents the Office of Structural Materials for your project.

Inspected By: Hall, Steven

Quality Assurance Inspector

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Reviewed By: Prue,Erik

QA Reviewer